

REMARKS

Reconsideration is respectfully requested.

Claims 1-10 and 12-42 are pending in this application. Claims 1 and 22 have been amended to more clearly define the invention. A limitation has been inserted into Claim 1 to provide structural recitation of the disposition of the background elements and Claim 22 has been amended to correct an inadvertent typographical error.

Claims 1-10 and 12-20 and 22-41 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Yoshitake et al. (U.S. Patent No. 5,991,078, hereinafter “Yoshitake”). Claims 21 and 42 have been separately rejected under 35 U.S.C. § 103(a) as being obvious over Yoshitake in view of Staub et al. (U.S. Patent No. 6,359,734).

The Office Action has rejected claims 1-10 and 12-20 and 22-41 under 35 U.S.C. § 102(e) as being anticipated by Yoshitake. Yoshitake is directed to a display medium that represents a display pattern using the contours of diffraction gratings. The display patterns in the diffraction gratings move smoothly as the visual reference point moves. Yoshitake further discloses multiplexing multiple display patterns using fine mesh pixels.

The present invention is directed to a diffractive device having background diffractive structural elements and interstitial diffractive structural elements. The diffractive action of the background elements is modulated by the interstitial elements.

The combination of background elements and interstitial elements may occupy a variety of configurations. In one embodiment, the device includes a plurality of interstitial elements interspersed at least partially longitudinally alongside a background element, or alongside another interstitial element that extends alongside a background element, such that the background elements extend into and between the interstitial elements. In another embodiment, the device includes a plurality of interstitial diffractive structural elements, wherein at least some

of the plurality of interstitial elements are smoothly connected to one or more of the background elements.

The above amendment to claim 1 serves to more clearly define the invention and distinguish it from Yoshitake. As amended, claim 1 clearly recites that the interstitial elements are interspersed between the background elements such that the background elements extend into and between the interstitial elements. This feature confers enhanced security by making it much more difficult for the optical effect mechanisms to be decoded and furthermore serves to minimize extraneous diffuse scattering effects.

It is asserted in the Office Action that Yoshitake may be broadly interpreted to disclose interstitial diffraction gratings A, A' interspersed between the background elements B, B' and interspersed at least partially longitudinally alongside a background element B, B', or alongside another interstitial element A, A' that extends alongside a background element B, B'. Applicant respectfully submits that even this broad interpretation of the disclosure does not provide that the background elements extend into and between the interstitial elements.

Referring to Figure 5 in Yoshitake, the Applicant respectfully submits that it would not be reasonable to conclude that the background elements B' extend into and between the interstitial elements A' simply because the schematic representation of the diffraction gratings A', B' shows the lines representing "grooves" intercepting the boundaries of the two types of diffraction gratings A', B'. Examination of Figure 5 would not suggest or disclose to one of ordinary skill in the art that the background elements B' extend into the interstitial elements A'. In fact, in Fig. 5 the regions containing diffraction gratings A' and B' are clearly demarcated by unbroken lines outlining the form of the characters "DNP". This could be reasonably interpreted to suggest to one of ordinary skill in the art that the "grooves" A', B' are not continuous from one diffraction grating B' to the

other A'. Applicant therefore respectfully submits that Fig. 5 does not reasonably disclose background elements B' extending into and between the interstitial elements A'.

Claim 22 was also rejected under 35 U.S.C. § 102(e) as being anticipated by Yoshitake. Claim 22 recites that the interstitial elements are dispersed between the background elements and at least some of the plurality of interstitial elements are smoothly connected to one or more of the background elements. This feature confers the advantage of providing substantially continuous grooves or ridges to minimize extraneous diffuse scattering effects. The Applicant respectfully submits that Fig. 5 of Yoshitake does not provide reasonable disclosure to suggest to one of ordinary skill in the art that some of the interstitial diffraction gratings A' are smoothly connected to one or more of the background diffraction gratings B'.

Applicant does not dispute the general concept that a drawing alone can support a § 102 rejection. However, to do so, the drawing must show "all of the claimed structural features and how they are put together," Jockmus vs. Leviton, 28 F.2d 812 (2d Cir. 1928). Therefore, in order to anticipate what is claimed in the present application, the drawing must provide an enabling disclosure. Applicant respectfully submits that Figure 5 of Yoshitake does not enable what is claimed in the present application.

The drawing must be evaluated for what it reasonably discloses and suggests to one of ordinary skill in the art. In re Aslanian, 590 F.2d 911, 200 USPQ 500 (CCPA 1979). The Office Action contends that Fig. 5 of Yoshitake discloses that at least some of the interstitial diffraction gratings A' are smoothly connected to one or more of the background diffraction gratings B'. Applicant respectfully submits that one of ordinary skill in the art would more reasonably interpret the unbroken line outlining the form of the characters "DNP" in the visual display medium to indicate that the lines representing "grooves" B' which happen to intercept a line

representing "grooves" A'. It is respectfully submitted that this structure does not indicate that the interstitial elements A' are smoothly connected to one or more of the background elements B', or for that matter, that the background diffractive elements B' extend into and between the interstitial elements A'. Furthermore, Applicant submits that one of ordinary skill in the art would be unlikely to adopt the interpretation set forth in the rejections, since there is no support therefor in the Yoshitake specification. In fact, the Yoshitake specification teaches away from that interpretation in indicating that the diffractive gratings A, A' are quite different from the diffractive gratings B, B', as is described at col. 6, lines 28-43 and col. 7, line 67 to col. 8, line 6. It is clearly evident from these descriptions that it is by providing the distinct regions of different diffraction gratings A, A' and B, B' that the display and design effects are achieved by Yoshitake. Therefore, Applicant respectfully submits that some supporting evidence in the description beyond that shown in Fig. 5 is necessary to enable the assertion that Yoshitake anticipates Claims 1 and 22, as presently claimed.

Given the distinction of independent claims 1 and 22 over Yoshitake, it is submitted that dependent claims 2-10, 12-21 and 23-42 are similarly distinguished and therefore also allowable.

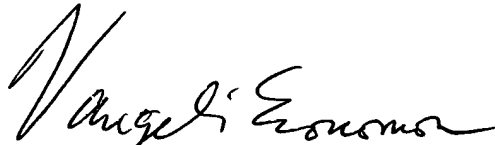
Claims 21 and 42 have been rejected as obvious over Yoshitake in view of Staub et al. (U.S. Patent No. 6,359,734). Given that independent claims 1 and 22 have been distinguished over Yoshitake and that Staub et al. fail to teach any features which have been shown not to be anticipated by Yoshitake, as shown above, it is respectfully submitted that a *prima facie* case of obviousness has not been made out. Moreover, the references fail to teach that the teaching of Yoshitake and Staub et al. should be combined, beyond a general statement that to do so would "provide for additional security features." It is respectfully submitted that this fails to provide

any incentive to combine beyond a general and unspecified desire to make the product work better.

In view of the foregoing amendments and remarks, it is believed that the outstanding rejections have been traversed.

For the above reasons, Applicants respectfully request reconsideration and withdrawal of the outstanding rejections and earnestly solicit an indication of allowable subject matter. Should there exist any minor issues that can be easily resolved by a telephone conference, the Examiner is requested to call the Applicant's undersigned representative at the number provided below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Vangelis Economou", written over a horizontal line.

Vangelis Economou, Reg. No. 32,341
c/o Ladas & Parry
224 South Michigan Avenue, Suite 1200
Chicago, IL 60604
(312) 427-1300

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